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FEDERAL COMMUNICATIONS COMMISSION
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In the Matter of

Petition of Alliance for Public Technology)	
Requesting Issuance of Notice of Inquiry)	
and Notice of Proposed Rulemaking to)	RM No. 9244
Implement Section 706 of the 1996)	File No. CCB/CPD 98-15
Telecommunications Act)	

REPLY COMMENTS OF NEXT LEVEL COMMUNICATIONS

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REPLY COMMENTS OF NEXT LEVEL COMMUNICATIONS

I. Introduction and Summary

Next Level Communications ("NLC") was founded in July of 1994 to develop cost-effective solutions for providing local loop telecommunications services, including traditional telephony services, as well as new switched digital video and high speed Internet access services. NLC is submitting reply comments in this proceeding because NLC believes that current regulation creates unnecessary and artificial barriers to the deployment of advanced technologies, including local loop systems developed and manufactured by NLC.

NLC has developed the "NLevel³" product, which can be configured for Fiber-to-the-Curb ("FTTC") deployments as well as for Digital Loop Carrier ("DLC") applications.^{1/} When deployed in either a FTTC or DLC configuration, the NLevel³ equipment can support advanced broadband services by the integration of coaxial cable or twisted wire pair modems. The twisted wire pair modems utilize one of the Digital Subscriber Loop ("DSL") transmission techniques for copper pairs, which are generically termed "xDSL," and include Very High Speed Digital Subscriber Loop ("VDSL"), Rate Adaptive Digital Subscriber Loop ("RADSL") and Asymmetric Digital Subscriber Loop ("ADSL"). Absent regulatory reform, however, these capabilities may not be widely deployed to the American people.

The Alliance for Public Technology's ("APT") petition for a Notice of Inquiry ("NOI") and a Notice of Proposed Rulemaking ("NPRM") is timely and appropriate. Under the current regulatory environment, the promise of advanced telecommunications networks as envisioned by Section 706 and as otherwise available from manufacturers such as NLC will

^{1/} NLevel³ can be deployed in broadband-first or in telephony-first applications, and is actively being deployed by two Regional Bell Operating Companies, Bell Atlantic and US West.

be illusory. The Commission should embrace public policies which encourage long-term broadband infrastructure investment. APT's petition discusses several measures the Commission can adopt and which NLC supports, including: 1) the elimination of cost allocation impediments to efficient pricing of advanced broadband services; 2) application of the existing unbundling and resale requirements only to equipment in the existing telephone network, and not to equipment used to provide advanced capabilities; 3) modification of the Commission's interconnection policy, which is deterring facilities-based competition; 4) elimination of depreciation regulation; and 5) promotion of the use of price caps for basic service charges.^{2/} NLC specifically requests that the Commission exclude xDSL modems and terminal equipment from the unbundling requirements of Section 251. The Commission can also revise existing customer premises equipment ("CPE") rules to give network operators and consumers greater flexibility with regard to the deployment of broadband equipment in the home. In addition, the Commission should allow deployment of broadband services to be free from pricing regulation. Finally, the Commission should be wary of requiring strict penetration rates for xDSL deployment.

NLC believes that regulatory relief as described herein and in the APT petition will well serve the public interest by creating incentives to invest in these new technologies, thereby allowing the American people improved access to advanced communications capabilities. In this increasingly competitive global marketplace, the United States cannot afford a second-tier telecommunications infrastructure.

^{2/} Several of these points are addressed in NLC's comments in Dockets 98-11, 98-26, and 98-32, and will not be repeated here. NLC requests that its comments in those proceedings be incorporated by reference in this proceeding. A copy of NLC's comments in CC Docket 98-26 is attached hereto as Attachment 1.

II. The Commission Should Immediately Issue an NOI and NPRM, as Requested in the APT Petition.

The global growth of new data services, and in particular the growth of the Internet, will not be entirely stifled by regulatory action or inaction by the Commission. What may be stifled is the growth of high bandwidth residential connections. Businesses and private networks will utilize "high cost" connections to connect to the Internet since such connections will simply be a "cost of doing business" in an Internet-based economy. These increased costs will be passed on to consumers in the form of higher service rates. Residential subscribers, on the other hand, will be forced to wait for the "bandwidth revolution" in order to obtain affordable services. Delay in the deployment of broadband connections to residences will have a negative impact on the growth of many sectors of the U.S. economy including personal computer sales and the development of new Internet-based services for consumers. Moreover, despite the growth and popularity of telecommuting, the limited supply of broadband capacity and expected resulting service price increases will instead constrain these work-related applications, as well as traditional home-use applications.

The Commission should immediately issue the NOI and NPRM requested by APT. Several commenters suggest that the Commission proceed first with an NOI and then, after that is completed, issue an independent NPRM.^{3/} Such a bifurcated, serial approach will create a significant delay in the deployment of broadband services, without creating any offsetting benefits.

In contrast, if issued in parallel, the NOI will show the Commission where there are problems and deal with the broad policy issues raised by Section 706, while the NPRM will

^{3/} Comments of MCI at P. 2; Comments of the National Association of Regulatory Commissioners at pp. 2-3; Comments of Intermedia Communications at pp. 4-5.

give the Commission the tools to fix those problems as outlined in APT's petition. Indeed, Section 706(b) requires that, should the Commission determine that advanced telecommunications capabilities are not "being deployed to all Americans in a timely and reasonable fashion," the Commission "shall take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and promoting competition in the telecommunications market."^{4/} The Commission will not be in a position to take immediate remedial action unless the Commission has already issued an NPRM, taken comments and replies, and thoroughly reviewed the record. To do otherwise will only result in redundancy and delay.

Contrary to the suggestion of Intermedia, the Commission need not wait until the very last day of the statutory deadline to issue the NOI and NPRM.^{5/} The Commission should, indeed, issue the NOI and NPRM immediately. The longer the Commission waits, the longer Americans will be deprived of advanced telecommunications services, directly contrary to the public interest and the Congressional intent reflected in Section 706.

III. Unbundling and Resale Requirements Under Section 251 Remove Incentives for Incumbent Local Exchange Carriers to Deploy Advanced Infrastructure.

NLC does not propose that the Commission provide incentives for the deployment of any particular technology -- fiber-based or otherwise -- but rather that the Commission clarify that advanced infrastructures, in whatever form, be free from Section 251 unbundling and resale requirements as requested by APT.^{6/} As explained by Robert Crandall and

^{4/} Telecommunications Act of 1996, Section 706(b) (emphasis added).

^{5/} Intermedia Communications Comments at 4.

^{6/} APT Petition, pp. 14-19.

Charles Jackson, the cost of deploying such advanced infrastructures is significant, and the current regulatory environment removes the proper economic incentives for such investment.^{7/} Reasonable and fair compensation for undertaking these risks can only be realized when the services are not regulated.

In particular, the unbundling of xDSL modems and terminal equipment will discourage xDSL deployment by incumbent local exchange carriers ("ILECs") and competitive local exchange carriers ("CLECs"). For example, when an ILEC uses NLC's equipment to provide xDSL services, the ILEC will purchase modems to place on either end of the subscriber loop. These modems allow the subscriber to obtain xDSL services using much of the current embedded network. Any CLEC or ILEC serving that subscriber can place the same or similar electronics at the end of the loop.^{8/} If the Commission requires that equipment such as the NLC modems be unbundled, no ILEC will invest in the equipment, since competitors, with no investment risk at all, will be allowed to avail themselves of the technology.

NLC supports the ability of CLECs to provide xDSL services to customers, and notes that CLECs are free to purchase xDSL terminal equipment and modems from NLC or other equipment providers. Requiring xDSL terminal equipment and modems to be unbundled, however, will result in ILECs limiting their deployment of the equipment, thereby significantly delaying the availability of such services to most consumers.

^{7/} Comments of Keep America Connected, Appendix 1.

^{8/} See Comments of Compaq Computer Corp. in CC Dockets 98-11, 98-26 and 98-32 at pp. 7-8.

IV. Existing CPE Rules do not Create Incentives for Deployment.

The present rules for CPE were developed in the context of and revolve around the definition of the analog plain old telephone service ("POTS") interface as reflected in Part 68 of the Commission's Rules, as well as the "unbundling requirement" of Section 64.702(e) of the Commission's Rules. These rules have worked well for consumers with respect to analog telephone services and low-speed modem services over analog lines, but are problematic when applied to xDSL technologies.

The *Computer II* and *Computer III* proceedings attempted to neatly divide the network and terminal interface from the customer premises wiring and equipment, and also developed the concept of Network Channel Terminating Equipment ("NCTE"). Although the Commission has declared NCTE to be CPE and has narrowed the "multiplexer exception"^{9/} and the availability of waivers from the unbundling requirement, the Commission also recognized that this approach might not be suitable as the migration to digital platforms took place.^{10/} NLC believes that this latter prediction of the Commission has proven to be quite accurate.

NLC believes that regulatory relief to encourage the deployment of xDSL technologies should involve a modification of the CPE rules to remove the artificial distinction between CPE and network equipment based solely on location of the piece of equipment. NLC notes that the deployment of cable modems is not inhibited by distinctions

^{9/} See *Computer III, Phase II Reconsideration*, 3 FCC Rcd 1150, (1988) at ¶ 138; *Computer III Supplemental Notice*, 104 FCC 2d 958 (1986) at ¶¶ 322-325 (1986); and *Computer III Remand Hearings*, 5 FCC Rcd 7719 (1990) at ¶ 21.

^{10/} See *Computer III, Notice of Proposed Rulemaking*, 1985 FCC LEXIS 2770, at paras. 149-152 (1985).

based on location,^{11/} and believes that a similar approach should be applied to xDSL equipment. Consumers should have the option of leasing xDSL modems as part of the service, as well as have the option to purchase or lease such equipment on an unbundled basis, particularly during the initial years of deployment when the network interfaces are evolving. Thus, waivers from Section 64.702(e)'s unbundling requirement should be made freely available for early xDSL deployments. In addition, regulatory forbearance from the unbundling rule to allow broadband network equipment to be deployed in the customer premises should be allowed, when such equipment utilizes one or more standard interfaces and is commercially available. Retention of the current requirements will otherwise frustrate the deployment of these advanced communications technologies.

Finally, NLC believes that the Commission should clarify that the voluntary participation of manufacturers in standards bodies meets network disclosure requirements. When manufacturers participate in standards bodies they agree to licensing on a fair and non-discriminatory basis, and ultimately to transfer technology to licensees to enable incorporation of the network interface technology in a variety of new broadband CPE. Thus, the purposes of network disclosure obligations are met in this manner, without compromising proprietary technology as would occur under the present network disclosure requirements.

V. The Commission Should Allow Deployment of Broadband Services to be Free from Pricing Regulation.

NLC believes that rapid deployment of advanced services will only occur if those services are unregulated and free from price cap or other pricing regulation. Additionally, as

^{11/} Cable modems have been deployed under Title VI with no CPE unbundling or network disclosure requirements.

suggested in the APT petition,^{12/} the Commission must lead the way in eliminating depreciation regulation and adopting pure price caps for basic (historically regulated narrowband) services. Furthermore, the use of productivity factors in price caps for regulated services is a mechanism which can be used to encourage the use of innovative technologies in the local loop. Exogenous costs applied to new technology deployment, such as discussed in the Commission's open video system cost allocation proceeding,^{13/} would discourage, instead of encourage, investment in advanced services.

VI. The Commission Should be Wary of Requiring Strict Penetration Rates.

NLC notes that APT's suggestion that the Commission adopt policies to promote infrastructure investment^{14/} is well founded, but caution must be exercised in developing deployment criteria such as strict penetration rate measurements and schedules of advanced services deployment. Market forces, including the demand for bandwidth, must remain the primary driver for the deployment of broadband services. The ability of firms in the early stages of new services roll-out to selectively deploy these services in markets where the demand is relatively high will create incentives for larger scale deployment as the existing firm continues to earn a profit after each deployment. In addition, new firms will be encouraged to enter the market attracted by the level of profits and eventually this competition will drive down prices.

^{12/} APT Petition at p. 22.

^{13/} *Allocation of Costs Associated with Local Exchange Carrier Provision of Video Programming Services*, CC Docket No. 96-112, FCC No. 96-214, released May 10, 1996.

^{14/} APT petition at pp. 28-41.

VII. Conclusion

Under the current regulatory regime, there has been very little investment in advanced broadband infrastructures. By eliminating unnecessary regulatory impediments, as requested by APT and NLC, the Commission will further the public interest by supporting ubiquitous availability of advanced communications services. NLC strongly encourages the Commission to immediately issue the NOI and NPRM implementing Section 706 and explore all possible incentives for broadband deployment by all telecommunications carriers. For the foregoing reasons, NLC supports APT's petition and urges the Commission to issue the NOI and NPRM requested in APT's petition and herein.

Sincerely,



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ATTACHMENT 1

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In the Matter of

Petition of US WEST)	
Communications, Inc.)	CC DOCKET No. 98-26
for Relief from Barriers to Deployment)	
of Advanced)	
Telecommunications Services)	

COMMENTS OF NEXT LEVEL COMMUNICATIONS

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April 6, 1998

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I. Description of Next Level Communications

Next Level Communications ("NLC") was founded in July of 1994 to develop cost-effective solutions for providing local loop telecommunications services, including traditional telephony services and new switched digital video and high speed Internet access services. NLC is submitting comments in this proceeding because it shares US WEST's concern that current regulation creates unnecessary and artificial barriers to the deployment of advanced technologies, including local loop systems developed and manufactured by NLC.

NLC has developed the "NLevel³" product, which can be configured for Fiber-to-the-Curb ("FTTC") deployments as well as for Digital Loop Carrier ("DLC") applications. When deployed in either a FTTC or DLC configuration, the NLevel³ equipment can support advanced broadband services by the integration of coaxial cable or twisted wire pair modems. The twisted wire pair modems utilize one of the Digital Subscriber Loop ("DSL") transmission techniques for copper pairs, which are generically termed "xDSL," and include Very High Speed Digital Subscriber Loop ("VDSL"), Rate Adaptive Digital Subscriber Loop ("RADSL") and Asymmetric Digital Subscriber Loop ("ADSL"). Absent regulatory reform, however, these capabilities may not be widely deployed to the American people.

II. Introduction and Summary

Section 706 of the Communications Act was enacted as part of the Telecommunications Act of 1996¹ ("1996 Act"). Section 706 instructs the Federal Communications Commission ("Commission") and state commissions to adopt "regulating

methods" to encourage the timely deployment of advanced telecommunications capabilities. The deployment of advanced capabilities today is frustrated by regulatory impediments, including disincentives and uncertainty with respect to the recovery of investment in broadband infrastructures. NLC, based on its experience in the marketplace, observes that these regulatory constraints are presently operating to curtail investment in advanced local loop facilities.

Without the proper regulatory environment, the promise of advanced telecommunications networks as envisioned by Section 706, and as otherwise available from manufacturers such as NLC, will be illusory. The Commission should embrace public policies which encourage long-term broadband infrastructure investment. Without delay, the Commission should: 1) eliminate cost allocation impediments to efficient pricing of advanced broadband services; 2) not apply existing unbundling and resale requirements to equipment used to provide broadband services; 3) grant US WEST's request for interLATA relief; 4) revise existing customer premises equipment ("CPE") rules to give network operators and consumers greater flexibility with regard to the deployment of broadband equipment in the home; and 5) address US WEST's petition expeditiously.

The NLevel³ equipment is a product which can help deliver advanced telecommunications network services, thus fulfilling the Congressional intent of Section 706. NLevel³ can be deployed in broadband-first or in telephony-first applications, and is actively being deployed by two Regional Bell Operating Companies ("RBOCs").²⁷ Because the

²⁷ US WEST and Bell Atlantic have begun to deploy the NLevel³ local loop network technology.

product is cost competitive with non-upgradeable Digital Loop Carrier systems, it has clear deployment advantages in many situations. Despite the passage of the 1996 Act, uncertainty with respect to cost recovery mechanisms for advanced local loop infrastructures and other regulatory constraints continue to have a negative impact on the deployment of NLevel³ and other advanced network technologies. As a result, the public is being denied access to efficient and advanced telecommunications services. NLC is thus filing these comments to support the removal of regulatory roadblocks to infrastructure deployment and to insure that a competitive market will exist for broadband equipment and services in a timely manner.

NLC concurs with US WEST that xDSL services should be free from pricing, unbundling, and separations restrictions designed for voice calls. The Commission is permitted under Section 706 to take additional action to ensure that there are adequate regulatory incentives to support the high data rates and high penetration rates envisioned by Section 706 of the 1996 Act.

US WEST in its petition identifies other regulatory impediments to the rapid and widescale deployment of advanced communications technologies. The Commission should eliminate as quickly as possible any unnecessary regulations identified in this proceeding. This includes the removal of interLATA restrictions on high-speed broadband services as explained by US WEST in its petition.^{3/}

^{3/} InterLATA restrictions are particularly incompatible with advanced telecommunications, given the interLATA and international nature of the Internet and other high-speed data applications.

In addition to the transmission equipment developed by NLC, the NLevel³ system includes a Residential Gateway, which is a set-top device that serves as a termination unit in the home for high-speed signals received over a twisted wire pair xDSL transmission system. The Residential Gateway can provide television services to multiple television sets in the home without the need for additional set-top equipment, and serves as the network termination for data signals, which can be routed to computers in the home via a traditional Ethernet interface. Because of the wide discrepancy in CPE rules between Title II carriers and Title VI cable operators, NLC notes that its customers may be forced to make purchasing decisions regarding advanced residential equipment that are regulatory-driven, rather than market or economic-driven. The existing CPE rules do not provide the appropriate framework for xDSL deployment and substantial reform is needed to support the rapid, timely deployment of broadband services and equipment.

NLC believes that regulatory relief as described herein will well serve the public interest by eliminating disincentives to invest in these new technologies, thereby allowing the American people improved access to advanced communications capabilities. In this increasingly competitive global marketplace, the United States cannot afford a second-tier telecommunications infrastructure. If investment in advanced network infrastructures is to expand, the Commission must also recognize that granting petitions such as US WEST's should be only the beginning of more comprehensive regulatory relief.

III. Section 706 of the 1996 Telecommunications Act Provides the Basis for Regulatory Relief

Section 706 of the 1996 Act requires that the Commission and each State commission with regulatory jurisdiction over telecommunications services encourage the deployment of advanced telecommunications services. Furthermore, such deployment should be on a reasonable and timely basis -- suggesting that removal of barriers to the deployment of all xDSL and FTTC technologies (and not merely the ADSL technologies prevalent to date) is well within the regulatory relief contemplated by Congress in enacting Section 706. Moreover, the regulatory relief granted by the Commission should be such that barriers to infrastructure investment are truly removed, and that the infrastructure put in place will promote the Congressional intent of advanced services to all Americans.

A. Historic Pricing Rules Discourage Broadband Investment

In addition to avoiding the unnecessary and counterproductive regulatory impediments identified below and in the Petition of US WEST, the Commission should ensure that it does not create economic disincentives to investment in broadband technologies resulting from pricing rules. Historically, regulators imposed policy determinations in the form of arbitrary depreciation rates and cost allocation rules under a rate-of-return regulatory structure. The Commission moved away from that paradigm when it adopted a price cap form of regulation, which has been followed, in part, by the States. In adopting price cap regulation, the Commission acknowledged that the rate-of-return/detailed cost allocation model created

uneconomic investment incentives for the carriers, engendered a great deal of uncertainty and spawned a virtual morass of difficult (if not impossible) decisions for the regulators.

Particularly when shorn of the vestiges of rate-of-return regulation (such as "sharing" and arbitrary meddling in the guise of "exogenous changes"), price cap regulation avoids these regulatory pitfalls. Under a "pure" price cap model, carriers will make decisions as to how quickly to deploy broadband data services based on the actual economics of the technologies and their predictions of the demand for the new services. The carriers' investment decisions will not be driven by whether the regulator has correctly navigated the incredibly difficult task of determining how to properly allocate shared costs among a myriad of current and potential offerings. Likewise, the carriers' investment decisions will not be delayed by their need to avoid uncertainty as to what cost allocation rules are eventually adopted by the Commission.⁴⁷

At the same time, under price caps the customers of Plain Old Telephony Services ("POTS") are certainly no worse off regardless of what investment decisions the company makes, because the prices for his or her still-regulated POTS are constrained by the price cap ceilings. On the other hand, those POTS customers are better off insofar as they will have access to advanced broadband services at market-driven prices. Thus, NLC urges the Commission and the States to use regulatory models for those services where regulation is

⁴⁷ By way of example, the Commission has not yet acted on its notice of proposed rulemaking to address cost allocation rules for local exchange carrier provision of video services that was issued nearly two years ago. *Allocation of Costs Associated with Local Exchange Carrier Provision of Video Programming Services*, CC Docket No. 96-112, FCC No. 96-214, released May 10, 1996.

still necessary that let the marketplace, and not arbitrary cost allocation rules, drive the deployment of broadband services.

B. Unbundling and Resale Requirements Under Section 251 Create Disincentives for Incumbent Local Exchange Carriers to Deploy Advanced Infrastructure

NLC does not propose that the Commission provide incentives for deployment of any particular technology -- fiber based or otherwise -- but rather that the Commission clarify that advanced infrastructures, in whatever form, be free from Section 251 unbundling requirements as requested by US WEST.^{5/} As explained by US WEST, the costs of deploying such advanced infrastructures are large, and there are significant risks involved.^{6/} Reasonable and fair compensation for undertaking these risks can only be realized when the services are deregulated.

In fact, the current unbundling requirements actually provide a disincentive for an incumbent to invest in advanced infrastructure. For example, when a local exchange carrier ("LEC") uses NLC's equipment to provide xDSL services, the LEC will purchase modems to place on either end of the subscriber loop. These modems allow the subscriber to obtain xDSL services using much of the current embedded network. The Commission should not require that a LEC unbundle such equipment under section 251. Any company serving that subscriber can place the same or similar electronics at the end of the loop. If the

^{5/} US WEST Petition, pp. 44-48.

^{6/} US WEST Petition, pp. 46-47.

Commission requires that equipment such as the NLC modems be unbundled, no incumbent LEC will invest in the equipment, as competitors, with no investment risk at all, will be allowed to avail themselves of the technology. The result will be that consumers will be denied advanced services unless and until a competing LEC provides those services, because the regulatory regime under section 251 acts as a disincentive for the incumbent LEC to make substantial investments in its broadband infrastructure.

Additionally, the current regulatory framework, where the prices a carrier charges to its customers and its competitors (for resale or unbundling) are strictly limited, allows competitors to take advantage of an incumbent's investment with no risk of its own, and provides little incentive for companies ubiquitously to deploy advanced infrastructures. The Commission should use a paradigm, outside of the current regulatory framework, that will encourage the deployment of advanced infrastructures, so that eventually all Americans will be able to enjoy the benefits of advanced telecommunications services. In this manner, the Congressional intent of Section 706 will be fulfilled.

C. The Existing InterLATA Backbone for the Internet Cannot Meet Existing or Future Bandwidth Demands

As discussed in the US WEST Petition,²⁷ the Internet's backbone cannot support the present demand for bandwidth, especially in rural America, much less the future demands of an economy which may very well be based substantially on electronic commerce. US WEST, however, is foreclosed from meeting this important need because of present limits on

²⁷ US WEST Petition, pp. 8-24.

its allowable services and facilities. NLC believes that the Commission should quickly permit US WEST to provide high-speed broadband services without regard to present LATA boundaries in order to fill this critical void.

D. Other Regulatory Barriers

It is likely that it will be years before a full featured ADSL standard can be developed.^{3/} An ADSL standard is in the interest of manufacturers, network operators, and consumers, and there is little doubt that in the long term standards for both ADSL and other higher data rate DSL transmission systems will be adopted. In the interim, however, it will be necessary for network operators to roll out technologies from vendors which may be based on an emerging standard, but which contain substantial amounts of proprietary technology. Thus, in addition to the regulatory relief requested by US WEST under Section 706 of the 1996 Act, the Commission should grant regulatory relief that will allow xDSL deployment to occur prior to the development of full-featured, non-proprietary standards. Such interim relief will allow the rapid deployment of xDSL deployment that can support high penetration rates.

In addition, the present rules for CPE were developed in the context of and revolve around the definition of the analog POTS interface as reflected in Part 68 of the

^{3/} Efforts by the newly-formed Universal ADSL Working Group (UAWG) may eventually, in conjunction with other standardization efforts, result in a widely-deployed ADSL standard. Such a standard, however, will take a number of years to develop. By way of comparison, NLC notes that it took over four years for the MPEG-2 standard, a great success from a technical and business perspective, to evolve from a "frozen technical standard" to a licensing package.

Commission's Rules as well as the "unbundling requirement" of Section 64.702(e) of the Commission's Rules. These rules have worked well for consumers with respect to analog telephone services and low-speed modem services over analog lines, but are problematic when applied to the DSL technologies.

The *Computer II* and *Computer III* proceedings attempted neatly to divide the network and terminal interface from the customer's premises wiring and equipment, and also developed the concept of Network Channel Terminating Equipment ("NCTE"). Although the Commission has declared NCTE to be CPE and has narrowed the "multiplexer exception"^{9/} and the availability of waivers from the unbundling requirement, the Commission also recognized that this approach might not be suitable as the migration to more digital platforms took place.^{10/} NLC believes that this latter prediction of the Commission has proven to be quite accurate.

NLC believes that regulatory relief to encourage the deployment of xDSL technologies will involve a modification of the CPE rules, which will result in the removal of the artificial distinction between CPE and network equipment based solely on location of the piece of equipment. NLC notes that the deployment of cable modems is not inhibited by distinctions based on location,^{11/} and believes that a similar approach should be applied for

^{9/} See *Computer III, Phase II Reconsideration*, 3 FCC Rcd 1150, (1988) at ¶ 138; *Computer III Supplemental Notice*, 104 FCC 2d 958 (1986) at ¶¶ 322-325 (1986); and *Computer III Remand Hearings*, 5 FCC Rcd 7719 (1990) at ¶ 21.

^{10/} See *Computer III, Notice of Proposed Rulemaking*, 1985 FCC LEXIS 2770, at paras. 149-152 (1985).

^{11/} Cable modems have been deployed under Title VI with no CPE unbundling or network disclosure requirements.

xDSL equipment. Consumers should have the option of leasing xDSL modems unbundled from service offerings as part of the service, as well as the ability to purchase such equipment, particularly during the initial years of deployment when the network interfaces are evolving. Thus, waivers from Section 64.702(e)'s unbundling requirement should freely be made available for xDSL deployments, and regulatory forbearance from the unbundling rule for broadband network equipment in the customer premises should be implemented, when such equipment presents one or more standard interfaces and is commercially available. Retention of the current requirements would otherwise frustrate the deployment of these advanced communications technologies.

Finally, NLC believes that the Commission should clarify that the voluntary participation of manufacturers in standards bodies meets network disclosure requirements. When manufacturers participate in standards bodies they agree to licensing on a fair and non-discriminatory basis, and ultimately to transfer technology to licensees to enable incorporation of the network interface technology in a variety of new broadband CPE. Thus, the purposes of network disclosure obligations are met in this manner, without compromising proprietary technology as would occur under the present network disclosure requirements.

IV. Granting the Relief Requested in the Petition Should be Considered a Beginning, Not an End

For all the reasons stated above, the Commission should grant the relief requested. The Commission should not stop there, however. Granting US WEST's petition will allow near-term deployment of broadband services. The goals of Section 706 will not be truly